

Ellensburg Solar Community

ESCape to a Sustainable Future

To help meet the future energy needs of our customers, the City wants to take advantage of one of Ellensburg's most abundant energy resources, the sun (over 300 days of sunshine a year). A pilot community solar electric project is providing everyone in Ellensburg the opportunity to invest in locally produced clean electricity. Solar electric modules (panels) are converting free renewable sunshine directly into electrical power ready to be used in homes and businesses. moving parts, no noise and no pollution, solar electric modules are the simplest and cleanest power generation systems our community has available.

The first phase of the project - 120 solar modules (36KW) was completed in November and is located on the west edge of West Ellensburg Park, adjacent to Interstate 90. All of the power being produced goes directly onto the City's utility power lines. With community support and additional funding from the local utilities, the City, the County, CWU, local clubs/organizations and the local citizens we have the potential to expand the system to 550 solar modules (165KW) over the next three to five years.

This project uses an innovative financing approach that makes it unique among the various renewable energy programs in the Northwest. People in our community are being asked to partner with the City to help fund the project. In exchange for their financial support, the City will give the contributors a dollar credit on their electric bill for the value of the electricity produced by the solar system. Example: If a customer's contribution represents 3% of the total funds contributed by utility customers, that customer would receive 3% of the power produced by the solar project - deducted directly off their electric bill.

Contributions made by utility customers go primarily towards the purchase of the solar modules. The City's Conservation and Renewable program is funding the other project costs, such as solar system infrastructure, operations and maintenance, design development and marketing. A data monitoring system from Fat Spaniel Technology is also installed to disseminate the project's data http://view2.fatspaniel.net/Ellensburg/project/EndUserView.html. Check out the web site to see the power output of the solar system.

Utility staff is working with the University to find ways for CWU students to participate in the project. An engineering student designed a new adjustable racking system to hold the solar modules. CWU's Civic Engagement Center provided senior marketing students to design the project logo and other marketing materials. An IT student is also developing the solar web page for the City.

The City is committed to renewable energy to help meet Ellensburg's future energy needs. As community funds continue to come in - the Utility plans to expand the solar system in 24 module increments. For additional information, please contact: Gary Nystedt, Resource Manager for the City of Ellensburg (509) 962-7245



ESC - Project Information

Solar System

36 KW (120 – RWE Schott 300 watt solar modules) 5 - 6000U Sunny Boy Inverters Fat Spaniel Monitoring System inc Weather Station

Community Contributors

Number of Contributors – 66 to date Smallest Contribution - \$250 (minimum) Largest Contribution - \$11,000

System Costs - \$308,258

Soils Testing
Engineering
Site Development
Modules
Inverters
Racking system
Fencing
Ground Cover

Underground Trenching, Transformer, Connection to the Grid Data Monitoring System & Weather Station

Completion Date - November 2006

Estimated Annual Power Output - 40,500 kWhs

Northwest Solar Center

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Project - Solar Contractors

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